

# **Protecting the Perilous Passage: Principles and Practices for Improving Young Adult Outcomes**

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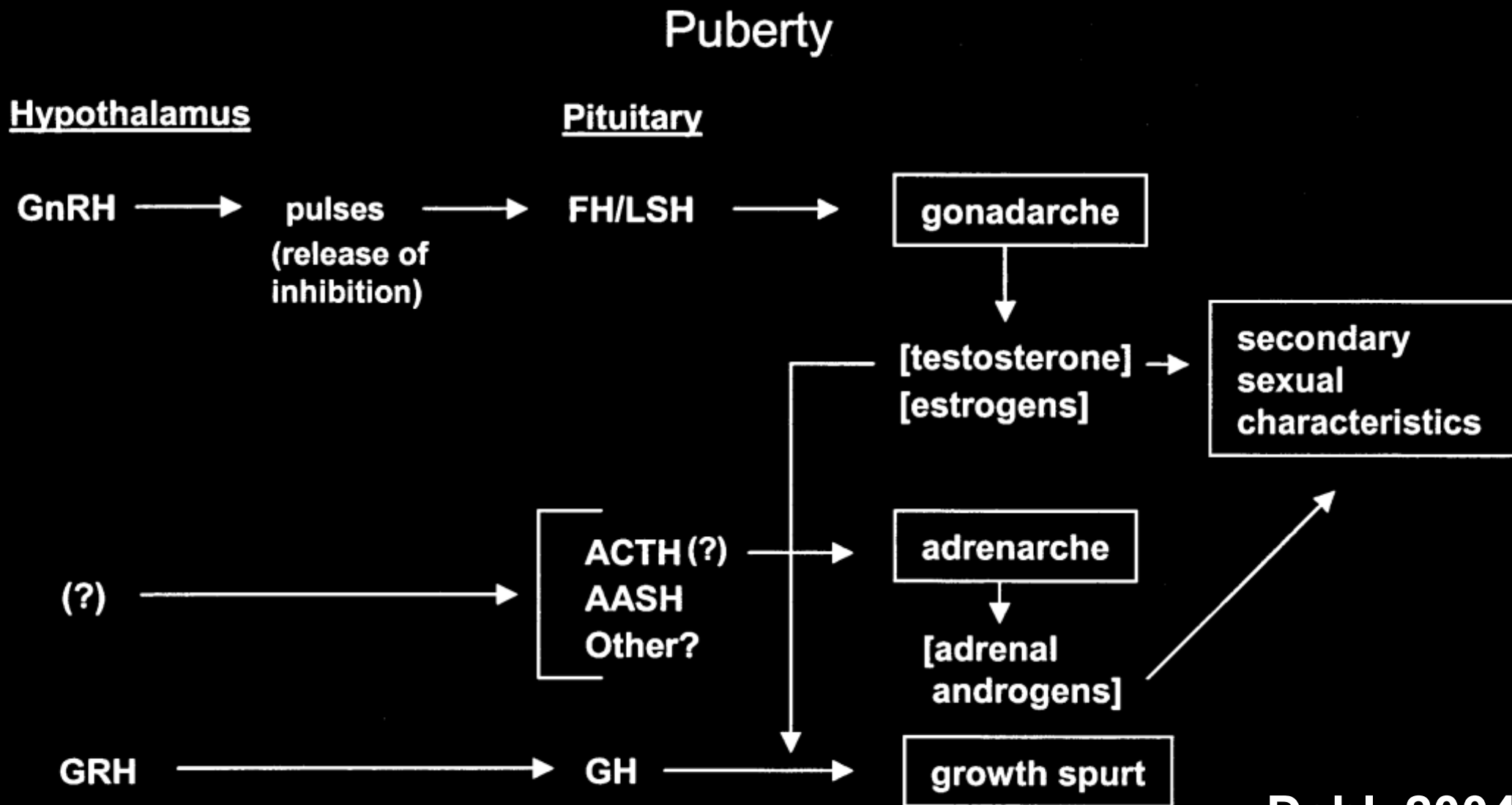
# What is “young adulthood”?

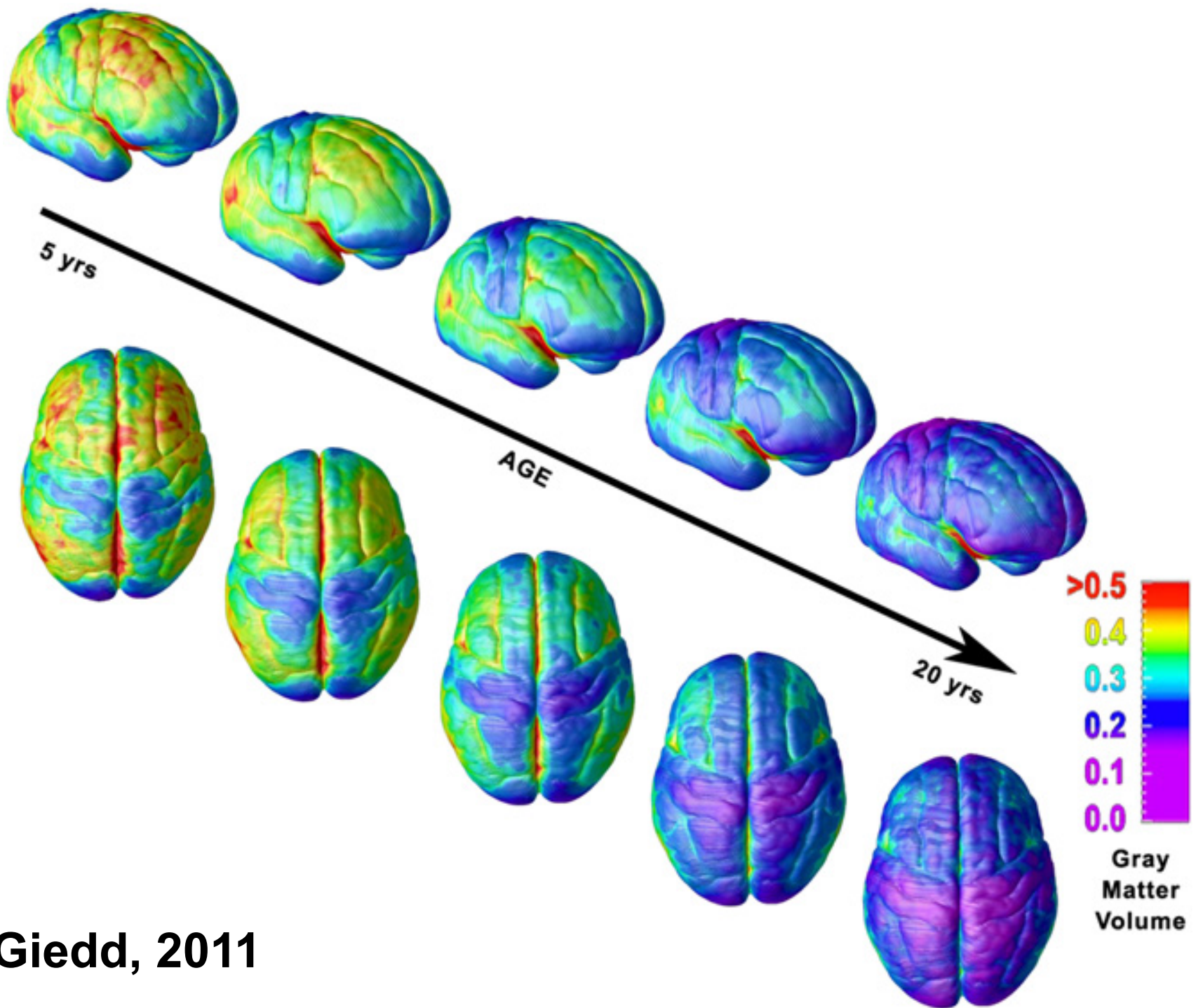


# What is “young adulthood”?

- **Must begin by understanding the middle stage, the transitional period between childhood and full adult maturation, i.e., adolescence**
- **Involves 3 types of hormonal transitions for full puberty**
  - **dramatic changes in body size and composition, driven by high rates of GH secretion**
  - **gonadarche – increased pulsing of gonadotrophin releasing hormone, pituitary releases LH/FSH, M/F differences**
  - **adrenarche – hormones released by the adrenal glands, DHEA and DHEAS**

# What is “young adulthood”?





Jay Giedd, 2011

# But in addition....

- interaction of complex behavioral, social, and familial influences
- Range of scientific disciplines have been focusing on this period
  - Affective neuroscience
  - Cognitive neuroscience
  - Social neuroscience
- Importance of Brain/behavior/social-context *interactions*

# The Paradox of this Period...

- Adolescents/YAs are bigger, stronger, increased reaction times, reasoning abilities, immune function, and able to withstand heat, cold, & physical stresses, but...
- Overall morbidity/mortality rates increase  $> 200\%$  during this period
  - Not due to cancer, infectious diseases, etc., but due to ....
  - Control of behavior and emotion
    - MVAs, suicide, homicide, SUD
    - Risk-taking behaviors – STDs,
    - Increased risk-taking, sensation-seeking, reckless behaviors

**Dahl, 2004**

# How & Why is this Happening?

- Paradox of better reasoning and cognitive abilities than children, yet much greater risk
- More prone to erratic, emotionally influenced behaviors, leading to intermittent disregard for consequences
- It's nothing new...
  - Aristotle: “Youth are heated by nature as drunken men by wine
  - Shakespeare: “I would that there were no age between 10 and 23, for there's nothing in between but getting wenches with child, wronging the ancientry, stealing, fighting...” (*The Winter's Tale, Act III*)

Dahl, 2004



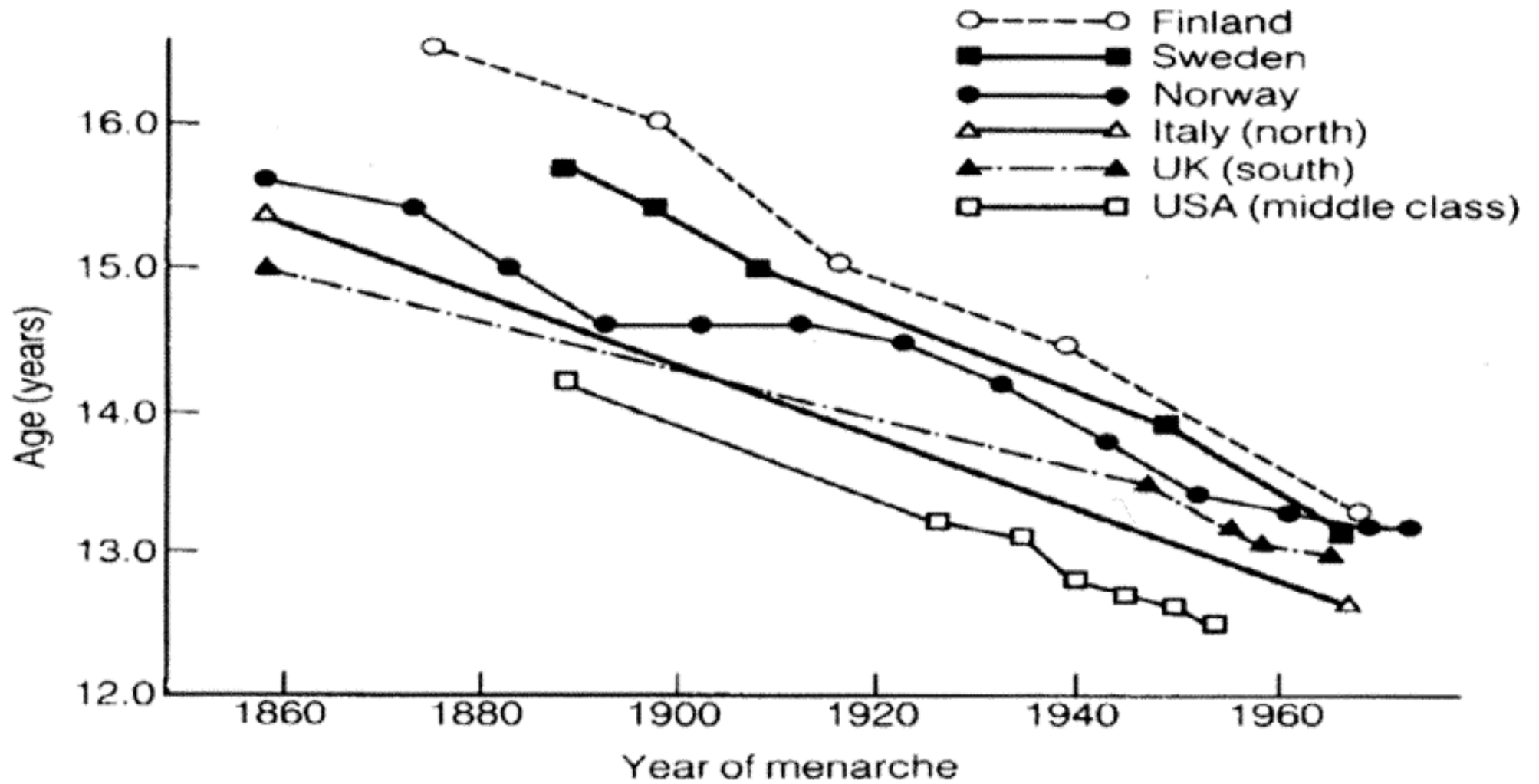
# Understanding the Perilous Passage

- **Development of behavioral & emotional regulation of adolescents/YAs**
- **Views of the problem:**
  - **A period of heightened “storm and stress?” (G.S. Hall)**
  - **“Raging hormones....?” – 1960-70’s**
    - **Youth with higher hormone levels do not have more problems**
  - **80% of youth succeed thru the transition without major difficulties**
    - **success in school, good relations with parents & peers, no SUD, successful vocational transitions**
    - **Yet adolescence is where roots for nicotine, alcohol, addictions, behavioral, emotional, and other long-standing problems take root**

# The Answer?

- **Not simple puberty or its related bodily maturational processes...**
- **Rather, the developing interplay of cognitive, social, and emotional skills and behaviors within adult life contexts**
- **How do societal roles/responsibilities and these individual maturational changes interact?**
  - 186 traditional/ancient societies (Schliegel & Barry, 1991)
  - Most have an “adolescent period”
  - End of childhood demarcated by rituals
  - Adulthood defined by adult roles (marriage, work roles, hunting, owning property, etc.)
  - Period from puberty to adult status usually brief, 2-4 years

# ADOLESCENCE



Tanner, 1989

# **Differences: Traditional vs. Current Societies**

**Dahl, 2004**

- **Average age of menarche in US is age 12**
- **Increasingly longer age to marriage**
  - 1970: 21 & 23, females/males
  - 2000: 26 & 27, females/males
- **Current age to “adult” status: 8-15+ years**
  - Marriage
  - Home ownership
  - College/grad school
- **Advantages of longer transitional period**
  - Increased education and skills
  - Exploration of different roles and relationships
- **Disadvantages?**

# **The Challenge for Us (and our Youth)**

- **Cognitive and emotional development**
  - **Many aspects of cognitive development, i.e., “cool” logic are intact, near-adult status, and “online” by mid-adolescence**
  - **Other aspects of affective (emotional development) development and regulation are at increased levels (see Table 1)**
  - **Starting the engines with an unskilled driver on a course that is much more complex than in traditional societies (Dahl, 2004)**
  - **A time of “ignited passions” – sports, hobbies, idealistic causes, etc. (Dahl, 2004)**

# The Challenge for Us (and our Youth)

**TABLE 1. Developmental domains having evidence for puberty-specific maturational changes**

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- romantic motivation
  - sexual interest
  - emotional intensity
  - changes in sleep/arousal regulation
  - appetite
  - risk for affective disorders in females
  - increase in risk taking, novelty seeking, sensationseeking (reward-seeking)
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**Dahl, 2004**

# **The Challenge for Us (and our Youth): II**

- **Adulthood requires developing self-control over behavior and emotions to appropriately inhibit and modify behaviors**
  - **Pursuit of long-term goals with many intermediate steps**
  - **Navigation of complex social situations despite competing emotions**
- **Requires not just brain and pubertal maturation, but time and experience within increasingly complex environments**

# At What Age are We “Mature”?

- Driving at age 16, military service at 18, drink alcohol at 21, rent a car at 25....
- Yet in some states, stand trial for murder at age 12 or 13?
- At what age should someone be able to make potentially self-destructive choices about health risks?
  - Smoking, drinking
  - Having (or refusing) an operation
  - Abortion
  - Quitting school
  - Body piercing
  - Join the military, get married, etc.?



# **Considerations for Parenting, Practice and Policy**

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- Length of the period of parental support and guidance?
- Scaffolds of societal support
  - College and vocational supports
  - Erikson's "moratorium"

# Considerations for Parenting, Practice and Policy

- Channeling of passions into constructive activities & programs
  - Ideas and ideals
  - Beauty, music, & art
  - Causes and programs
  - Social contexts & supports

# Considerations for Parenting, Practice and Policy

- **Better Identification of the 20% of Youth at Risk**
  - **Early substance use**
    - **Protecting developing brains**
  - **Depression & related conditions**
  - **Mainstreaming “mental health” into health**
    - **Stigma reduction**
  - **“ACE’s”**
  - **“Action Signs”**

# Adverse Childhood Experiences (ACEs Study)

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<u>Abuse</u>	<u>F</u>	<u>M</u>	<u>Total</u>
Emotional Abuse	13.1	7.6	10.6
Physical Abuse	27.0	29.9	28.3
Sexual Abuse	24.7	16.0	20.7
<u>Neglect</u>			
Emotional Neglect	16.7	12.4	14.8
Physical Neglect	9.2	10.7	9.9
<u>Household Dysfunction</u>			
Spousal Abuse	13.7	11.5	12.7
Substance Abuse	29.5	23.8	26.9
Parent Mental Illness	23.3	14.8	19.4
Separation or Divorce	24.5	21.8	23.3
Incarcerated Parent	5.2	4.1	4.7

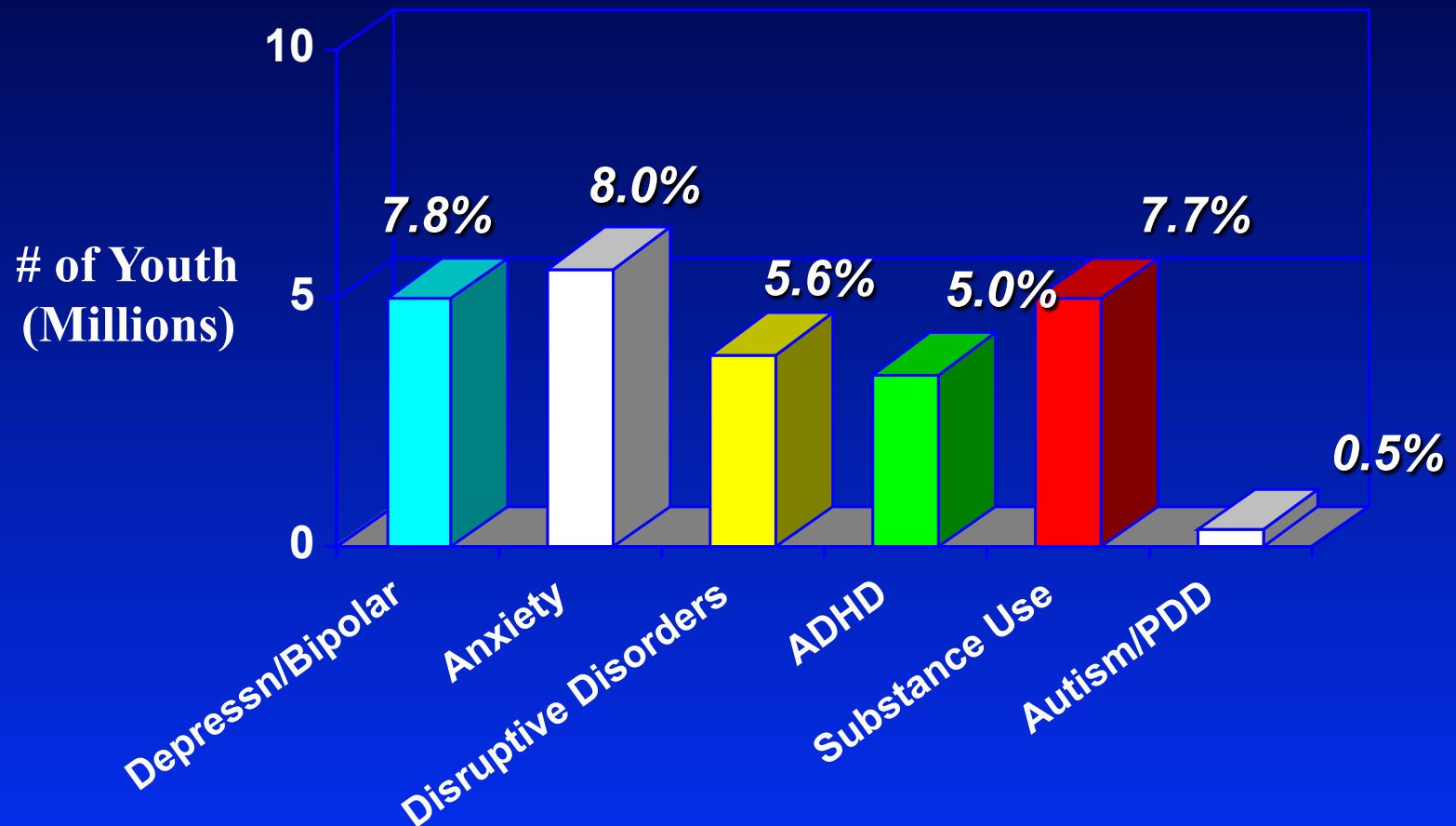
# Adverse Childhood Experiences (ACEs Study)

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Alcoholism and alcohol abuse  
Chronic obstructive pulmonary  
disease (COPD)  
Depression  
Fetal death  
Health-related quality of life  
Illicit drug use  
Ischemic heart disease (IHD)  
Liver disease

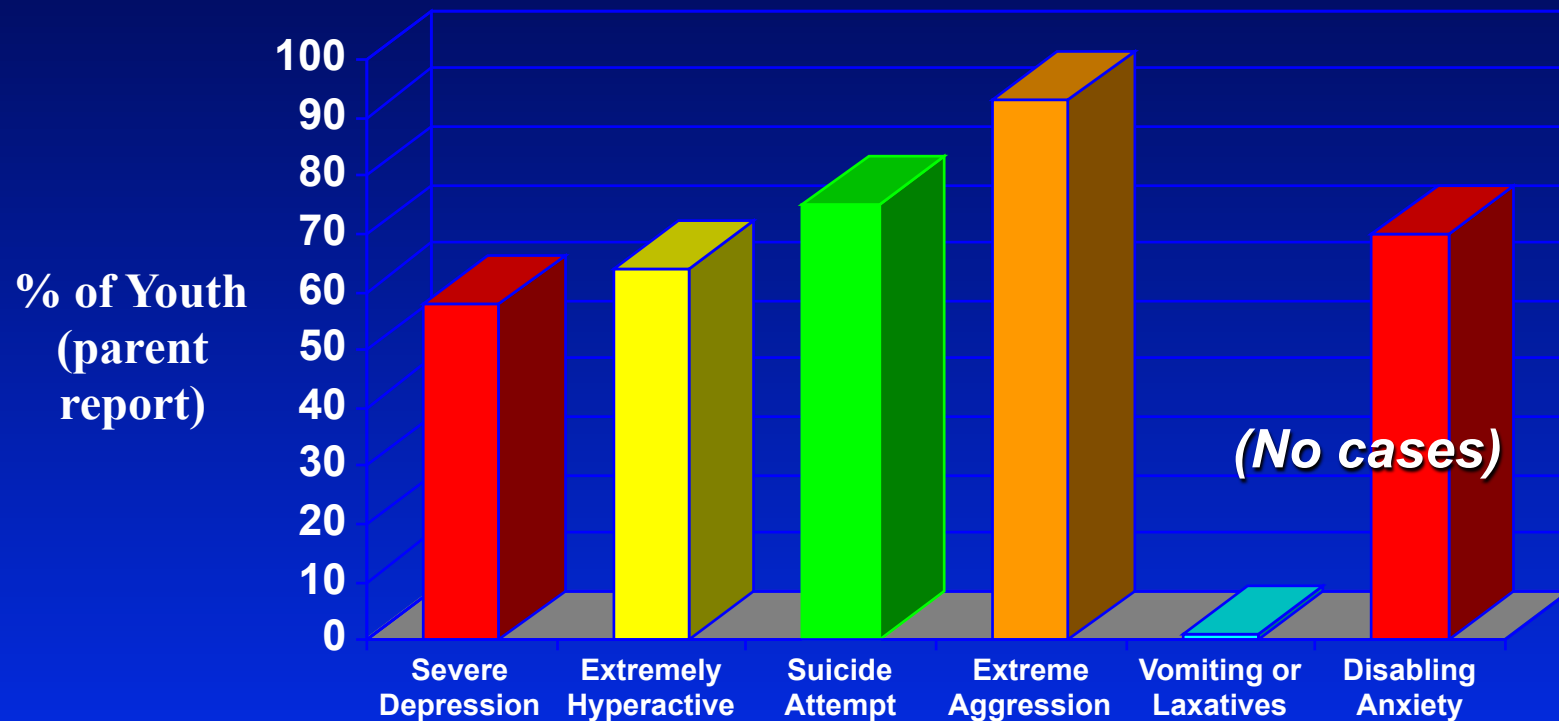
Domestic violence  
Multiple sexual partners  
Sexually transmitted diseases  
Smoking  
Suicide attempts  
Unintended pregnancies  
Early initiation of smoking  
Early initiation of sexual activity  
Adolescent pregnancy

# Extent of Mental & Substance Use Disorders In U.S. Adolescents



*Source: Office of the Surgeon General, and National Institute of Mental Health, 1999*

# Unmet Need by Indicator (Parent report, n = 2138)



*Jensen, Goldman, Offord, Costello et al., 2011*



# “Action Signs”

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- ✓ Extreme sadness and/or emotional withdrawal that lasts several weeks
- ✓ Trying seriously to harm or kill oneself, or making plans to do so
- ✓ Sudden overwhelming fear for no apparent reason, sometimes with racing heart or shortness of breath
- ✓ Starting frequent fights, using a weapon, wanting to seriously hurt others
- ✓ Frequent and severe explosive or out-of-control behavior that has harmed or threatens to harm others
- ✓ Using laxatives or vomiting to make oneself lose weight
- ✓ Extreme preoccupation with body image, exercise and losing weight that endangers one's health
- ✓ Extreme worries or fears that interfere with daily activities
- ✓ Severe mood swings affecting relationships with others\*
- ✓ Drastic changes in behavior or personality\*
- ✓ Extreme hyperactivity/impulsivity that puts the child in physical danger\*
- ✓ Repeated use of alcohol, drugs or other illegal substances

***Jensen, Goldman, Offord, Costello et al., 2011***

# Treatment Considerations

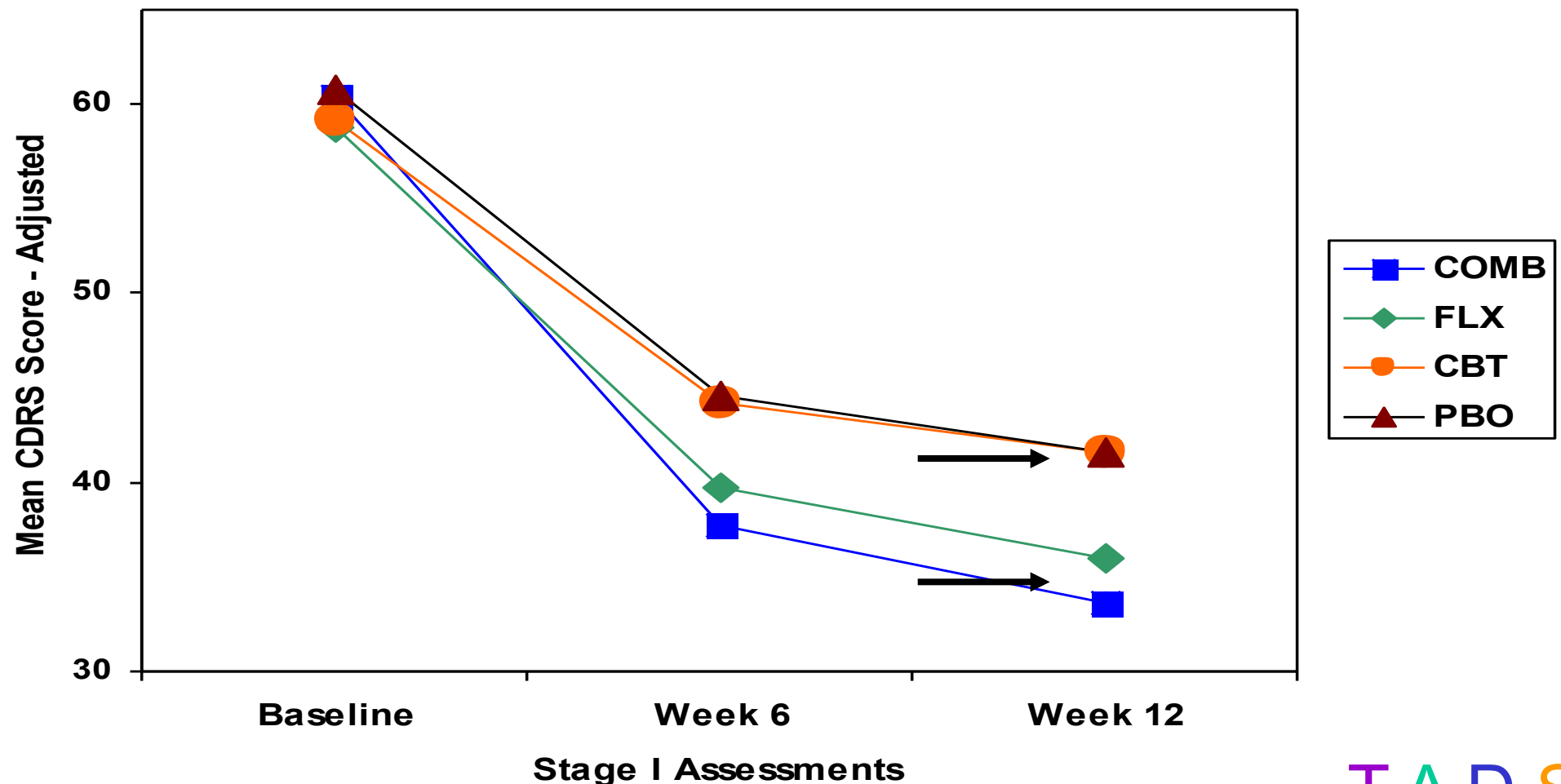
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## Scientifically Supported Treatments :

- **ADHD: 200+ medication studies, 80+ psychotherapy studies**
- **Depression: 3-6 medications (+/-), 2 forms of psychotherapy**
- **Obsessive Compulsive Disorder: 4 medications, 1 psychotherapy**
- **Anxiety Disorders: 2 medications, 1 psychotherapy**
- **Conduct disorders: 2 medications, 1 psychotherapy**
- **Autism: 2 medications, 1 psychotherapy**
- **Schizophrenia: 2 medications**

# Treatment of Adolescent Depression Study

## Depression Rating Scale:



# Where We Might Do Better: Example #1

## ADHD

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- **Some “overdiagnosis” of ADHD, but ½ of ADHD cases still missed in PC, special ed settings** (Bauermeister et al., 2002, Bussing et al., 1998, Olfson et al., 2003, Jensen et al., 1999, 2004)
- **Only one-fourth to one-half of PCPs use DSM criteria, and many do not get data from school teachers** (Copeland, 1987; Wolraich et al., 1990, 1997; Moser, 1995; Sloan et al., 1998)
- **Inadequate recognition of comorbid problems** (Jensen et al., 1989)
- **Inadequate dosing** (MTA Cooperative Group, 1999a, 1999b)
- **Inadequate follow-up (twice-yearly visits)** (MTA Cooperative Group, 1999a, 1999b)
- **Only 1/2 of PCPs include any kind of therapy** (Hoagwood et al., 1998)

## **Where We Might Do Better: Example #2: Major Depressive Disorder (MDD)**

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- **High rates of MDD in PCP settings (up to 28%)**
- **4 of 5 Youth with MDD missed in PCP settings (Chang et al., 1988, Kramer & Garralda, 1998)**
- **Most PCPs think it is their responsibility to identify depression (Olson et al., 2001, Jensen, 2002)**
- **Most PCPs “intend” to screen for depression and suicide, but do it less often than other areas (sexual activity/birth control), only 15% and 17% do it always (Halpern-Felsher et al, 2000; Middleman et al., 1995)**

# *How to Recognize the Moods of an Adolescent*



**HAPPY**



**DEPRESSED**



**EXCITED**



**ANXIOUS**



**MANIC**



**SUICIDAL**

## **Where We Might Do Better: Earlier/Improved Identification**

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- **3 in 4 youth with MH problems missed in PCP settings** (Costello, 1986, 1988; Dulcan et al., 1990; Chang et al., 1988, Kramer & Garralda, 1998)
- **SGO, USPTF, pediatric leaders, consensus panels, and President's New Freedom Commission acknowledge need to encourage MH screening and earlier of youth in PC-, school-, foster care-, and JJ-settings: “mental health check-ups”**
- **Brief screening tools can increase rates of identification** (Horwitz et al., 1992; Jellinek et al., 1999, Murphy et al., 1996)

## **How We Might Do Better: Early Identification Strategies**

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- **Valid tools have been deployed locally and nationally, and are feasible in PC, EPSDT, and Medicaid settings (Jellinek et al., 1999; Murphy et al., 1996; Pagano et al., 1996)**
- **Psychosocial Functioning/Impairment Screens**
  - **Child/youth report: Safe Times Questionnaire, Youth Outcomes Questionnaire; Problem-oriented Screening Instrument for Teens (POSIT), GAPS**
  - **Clinician-administered: CAFAS, CGAS**



# Recommendations

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- **Policy initiatives**
  - **Expand E-B programs**
  - **Investment in *quality* TA to providers**
- **Accurate information**
  - **Culturally specific, community-adapted and implemented, re: role and value of MH screening, “warning signs,” treatments**
- **Training/retraining**
  - **Federal, professional, and advocacy coalition for E-B curricula in training programs (PhD, MA, MSW, MD)**
  - **Teacher and counselor curricula-certification (understanding and attitudes re: youth disorders)**



**The REACH Institute: [www.TheReachInstitute.org](http://www.TheReachInstitute.org)**